

WFO Jackson, Mississippi

MONTHLY REPORT OF HYDROLOGIC CONDITIONS

REPORT FOR:

MONTH YEAR
November 2012

TO: Hydrometeorological Information Center, W/OH2
NOAA / National Weather Service
1325 East West Highway, Room 7230
Silver Spring, MD 20910-3283

SIGNATURE

Alan E. Gerard, Meteorologist In-Charge

DATE

12/20/2012

When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924)

☒ An X inside this box indicates that no river flooding occurred within this hydrologic service area.

Synopsis...

The month of November was fairly quiet with no reports of severe weather or flooding across the Hydrologic Service Area (HSA). Temperatures for the month were once again below normal across the region. Temperatures ranged from 2.1 degrees below normal at Jackson, MS to 3.6 degrees below normal at Greenwood, MS. Rainfall was also below normal throughout the region. Rainfall ranged from 1.83 inches below normal at Jackson, MS to 4.04 inches below normal at Greenville.

The month began with the HSA under high pressure. A cold front pushed across the area from late on the 3rd into the 4th, followed by strong upper level trough during the day of the 5th. The trough passage brought cooler and drier conditions to the region. Rainfall totals ranged from less than 0.25 to 1.00 inch over much of the HSA with some higher amounts up to 1.50 inches over northwestern areas. On the 7th, a weak cold front pushed into Central Mississippi and southern portions of Northeast Louisiana. No rainfall was reported. High pressure built into the area from the 8th to the 10th.

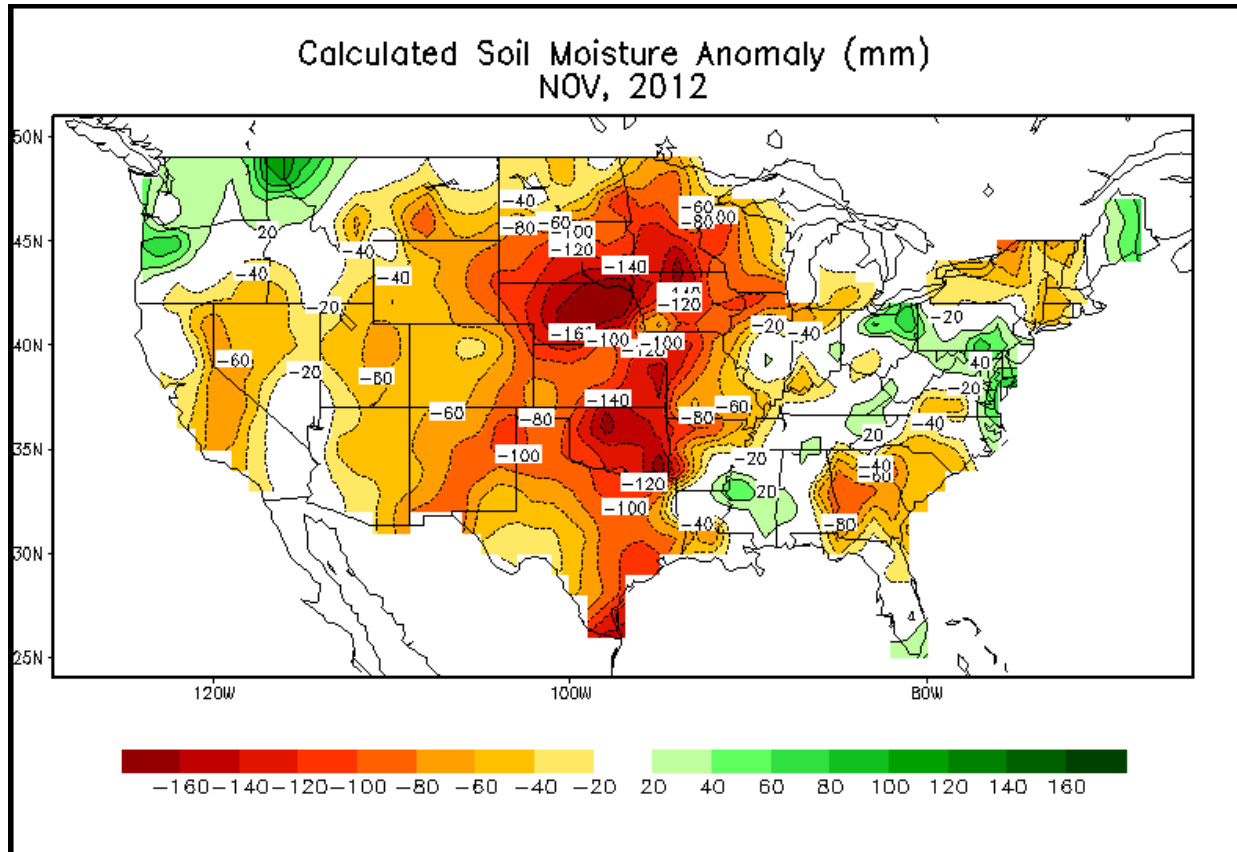
On the 11th, winds shifted to the south and temperatures and humidity increased as a front approached from the northwest. The front raced across the HSA from the 11th into the early hours of the 12th. Rainfall ranged from 0.25 to 2.00 inches across much of the area. Southeast Arkansas and northern portions of Northeast Louisiana received less than 0.50 inches. High pressure built into the region on the 12th. High pressure remained in control of the weather through the 22nd; however, some very light showers were noted across East and Northeast Mississippi as a weak upper level trough moved across the region on the 20th and 21st.

A cold front moved across the HSA and into the northern Gulf of Mexico on the 23rd. Some very light showers were reported across Southeast Arkansas, Northwest Mississippi, and our most northern sections of Northeast Louisiana. Little to no rainfall was reported across remaining locations of the HSA. High pressure moved in behind the front on the 24th and 25th. This ushered in some of the coldest temperatures of the season.

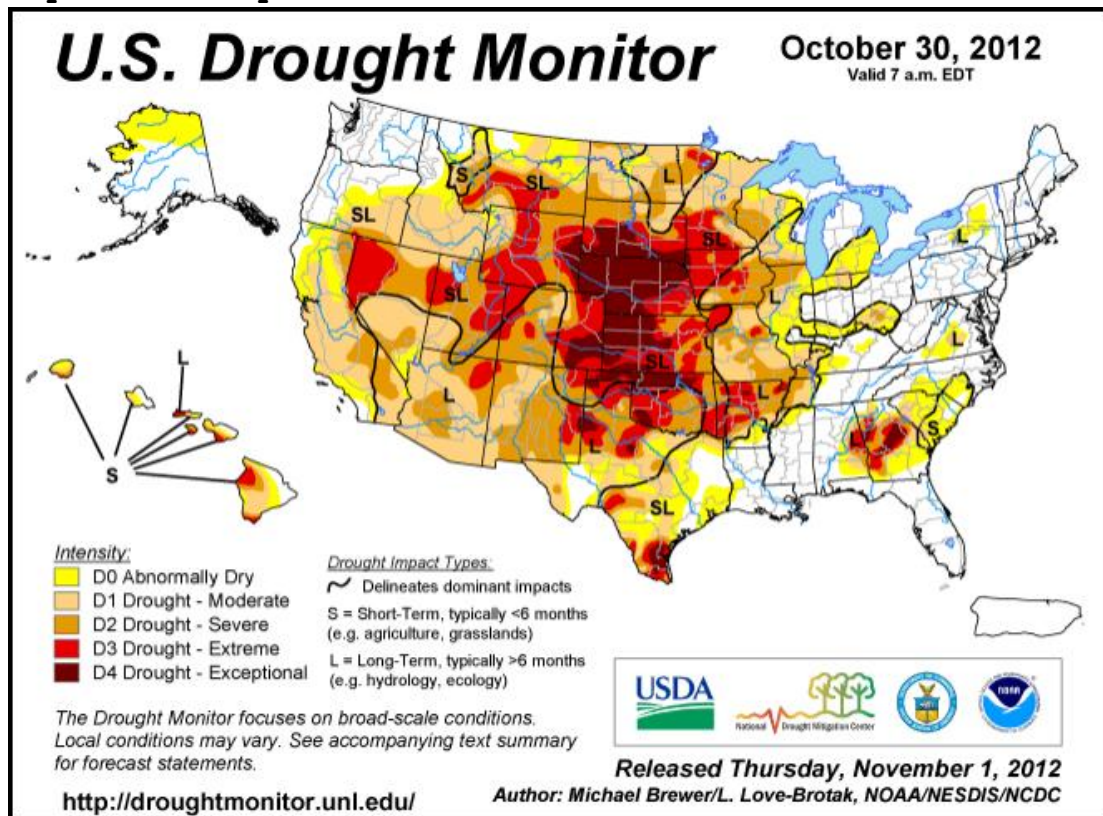
By the morning of the 26th, a warm front began pushing northward across the HSA bringing some light showers to the western half of the area. A cold front moved rapidly across the region from the afternoon of the 26th and into the morning of the 27th. Rainfall amounts ranged from 0.25 to 1.50 inches with some locations receiving up to 2.50 inches. High pressure with cold temperatures built back into the HSA on the 27th, and remained in place through the end of the month.

River and Soil Conditions...

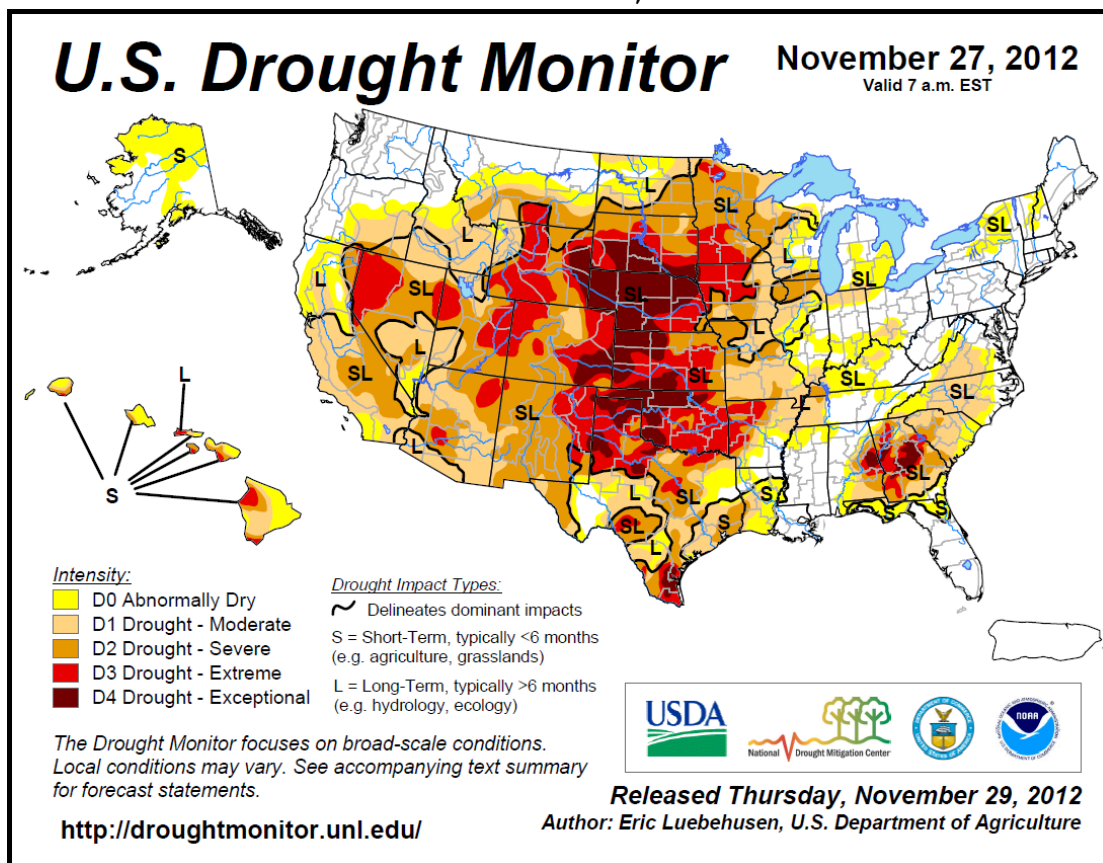
Soil Moisture Map:



Drought Comparison to prior month:



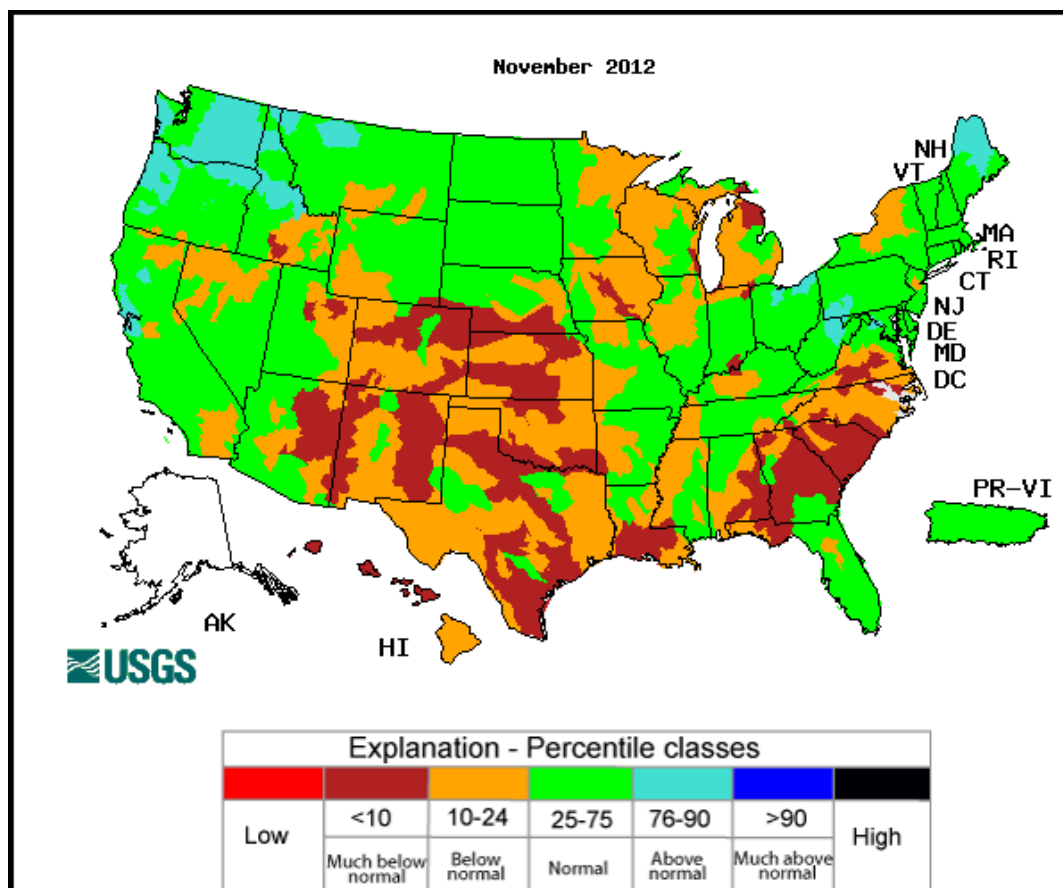
October 30th, 2012



November 27th, 2012

Streamflow:

The United States Geological Survey's (USGS) November 2012 river streamflow records were compared with all historical November streamflow records. Below normal streamflow was observed across Northeast Louisiana, the Big Black, Yazoo and portions of the Tombigbee and Pascagoula River Systems...and Southeast Arkansas. Normal streamflow was reported along the Pearl River and portions of the Tombigbee and Pascagoula River Systems...and Southeast Arkansas.



November Streamflow

River Conditions and flood potential:

No river flooding was reported during the month. River stages remained steady during the month. The Mississippi River had a minor rise around the middle of the month. After the river crested, falls occurred along the river through the end of the month. The river ended the month well below seasonal norms.

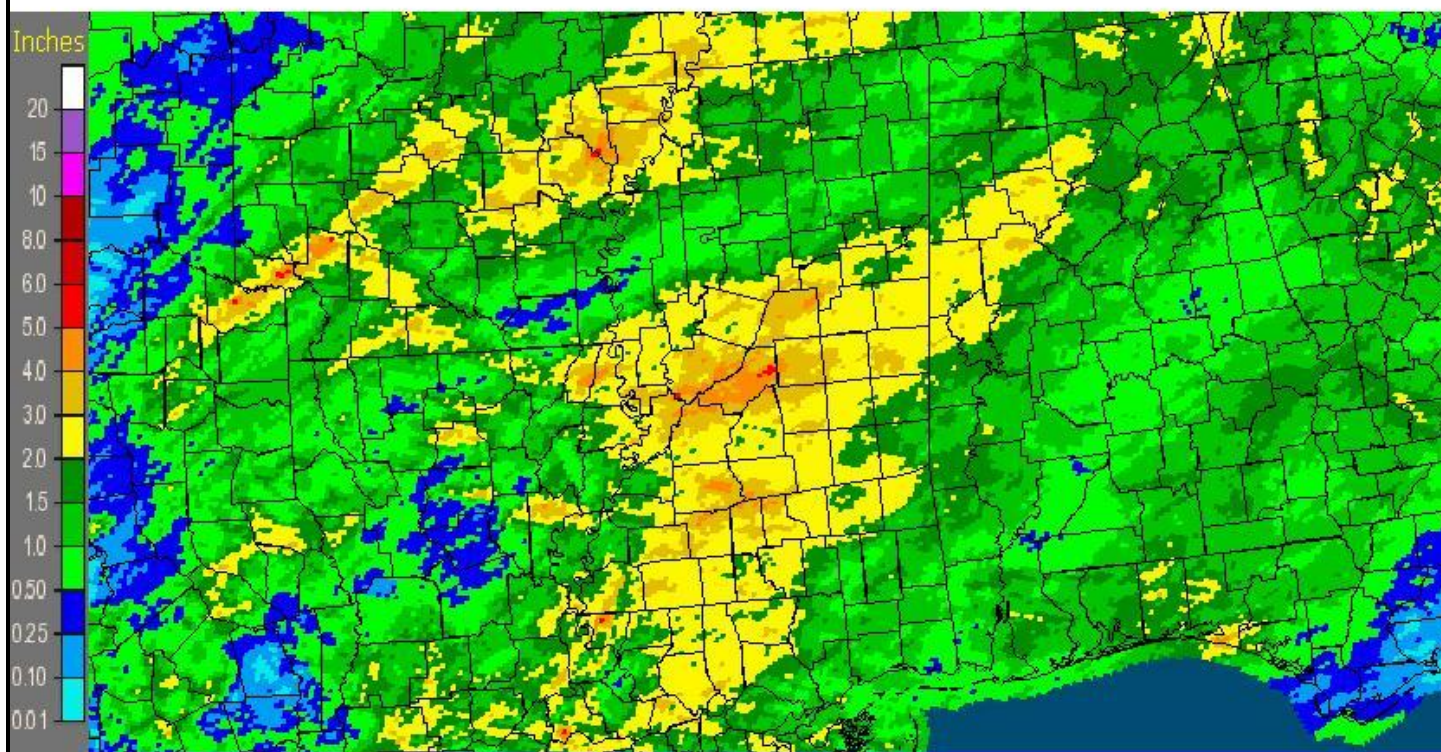
Temperatures are projected to be above normal across the HSA over the next 3 months, while rainfall is expected to be above normal across North Mississippi and Southeast Arkansas. The remainder of the HSA has equal chances of being below or above normal. Based on current soil moisture, streamflow, and the 3 month weather outlooks, flood potentials are as follows:

| | |
|---------------------------------------|----------|
| <i>Pearl River System:</i> | Average. |
| <i>Yazoo River System:</i> | Average. |
| <i>Big Black River System:</i> | Average. |
| <i>Homochitto River System:</i> | Average. |
| <i>Pascagoula River System:</i> | Average. |
| <i>Northeast LA and Southeast AR:</i> | Average. |
| <i>Tombigbee River System:</i> | Average. |
| <i>Mississippi River:</i> | Average. |

Rainfall for the month of November:

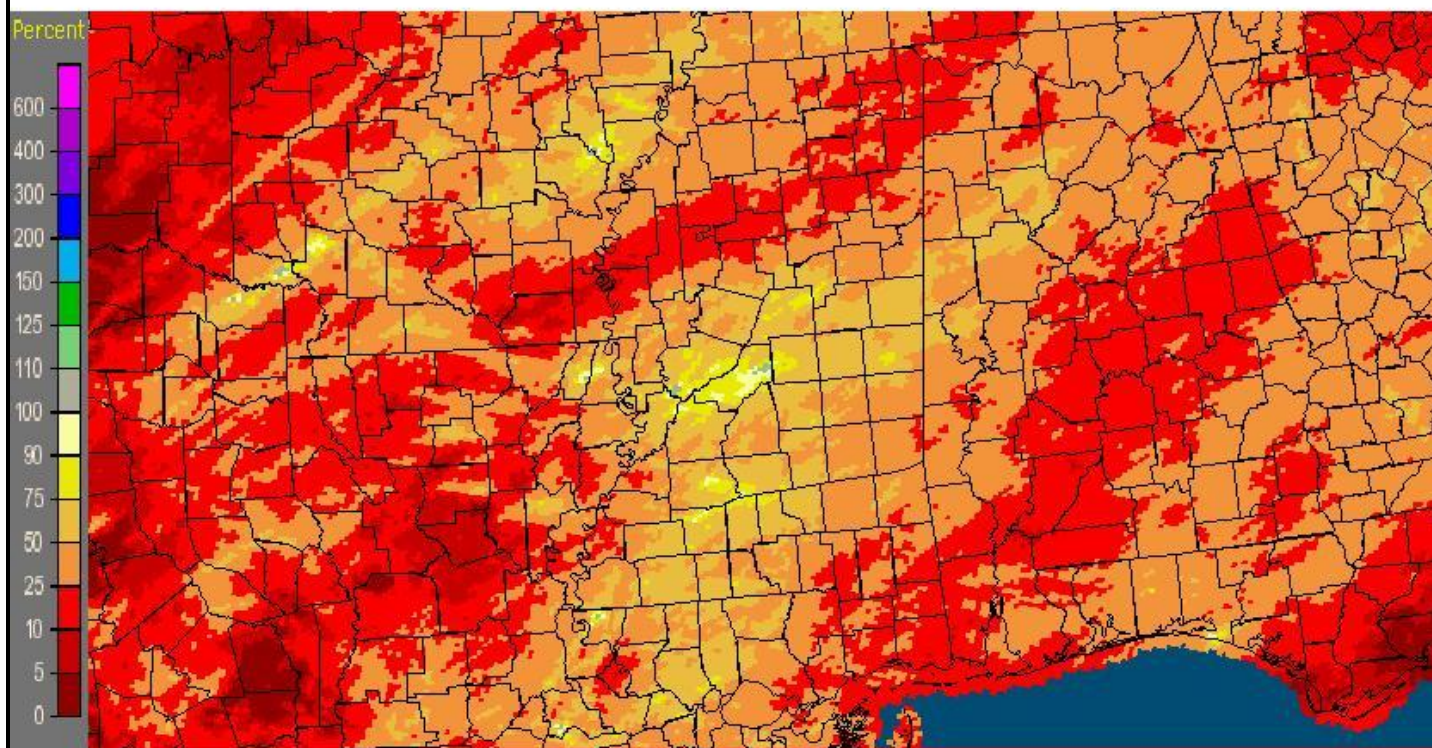
The largest rainfall amounts in the HSA from NWS Cooperative Observer reports during the period from 7 am on October 31st until 7 am on November 30th were: 5.29 inches at Satartia, MS; 4.28 inches at Canton, MS; 4.05 inches at Oak Grove, LA; 3.95 inches at Goshen Springs, MS; 3.70 inches Collins, MS; and 3.52 inches at Lake Providence, LA;

Mississippi: November, 2012 Monthly Observed Precipitation
Valid at 12/1/2012 1200 UTC- Created 12/3/12 21:37 UTC



November 2012 Rainfall Estimates

Mississippi: November, 2012 Monthly Percent of Normal Precipitation
Valid at 12/1/2012 1200 UTC- Created 12/3/12 21:41 UTC



November 2012 Percent of Normal Rainfall Estimates

Note: Observer rainfall and MPE may differ due to time differences.

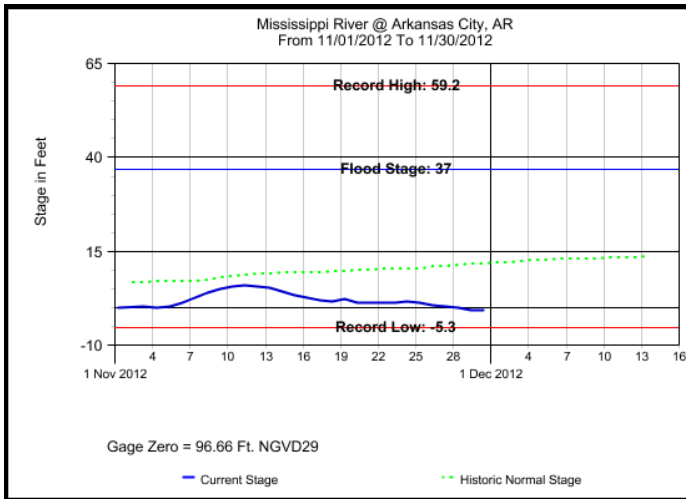
November rainfall for Selected Cities...

| City (Airport) | November Rainfall | Departure from normal | 2012 Rainfall | 2012 Departure from Normal |
|-----------------|----------------------|--------------------------|------------------|-------------------------------|
| Jackson, MS | 2.93 | -1.83 | 60.81 | +11.82 |
| Meridian, MS | 1.72 | -3.23 | 53.67 | +2.57 |
| Greenwood, MS | 1.81 | -2.71 | 37.19 | -8.93 |
| Greenville, MS | 1.02 | -4.04 | 36.25 | -10.77 |
| Hattiesburg, MS | 1.21 | -3.06 | 60.84 | +6.58 |
| Vicksburg, MS | 2.07 | -2.93 | 46.36 | -2.77 |

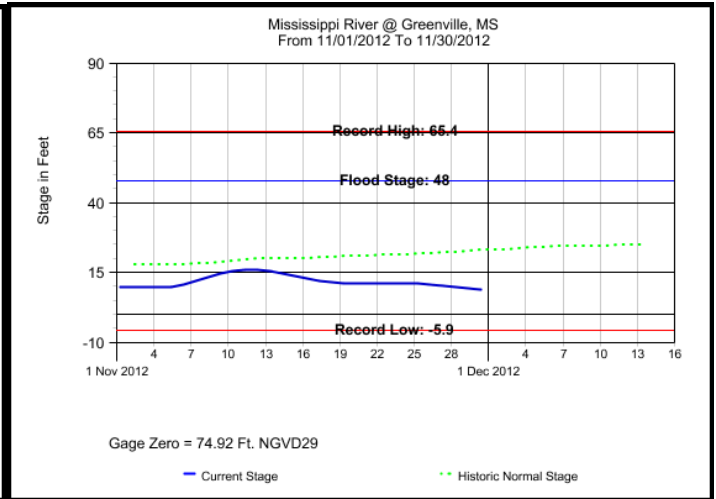
Mississippi River...

Mississippi River Plots for November, 2012

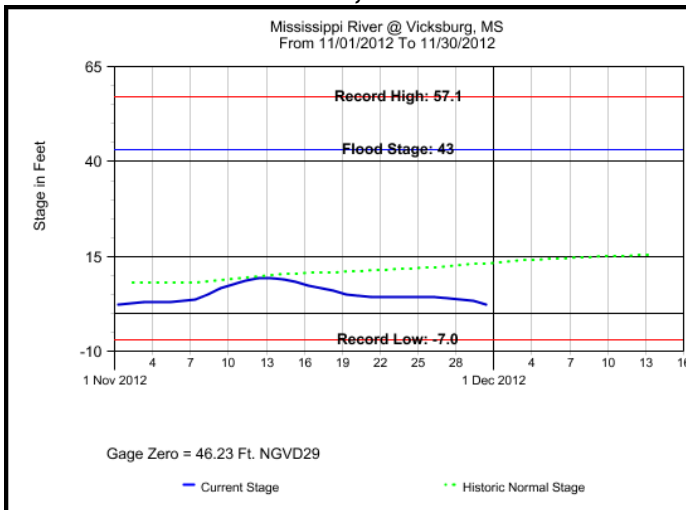
Plots Courtesy of the United States Army Corps of Engineers



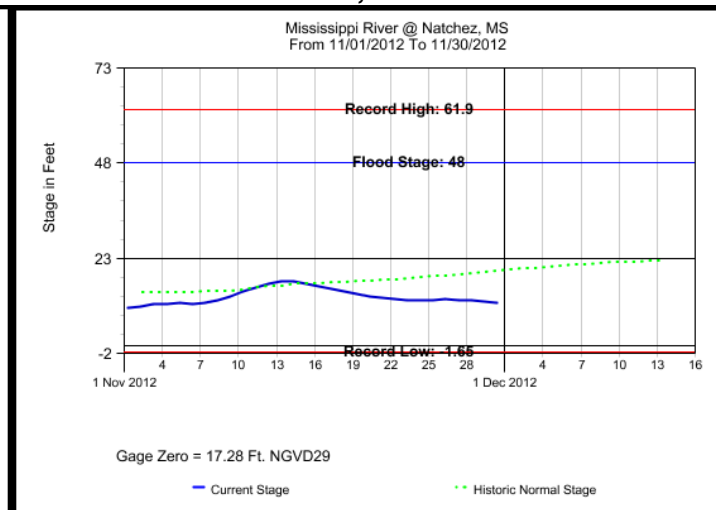
ARKANSAS CITY, AR



GREENVILLE, MS



VICKSBURG, MS



NATCHEZ, MS

Preliminary high and low stages for the month:

| Location | FS | High Stage(ft) | Date | Low Stage(ft) | Date |
|-------------------|----|----------------|----------|---------------|----------|
| Arkansas City, AR | 37 | 5.9 | 11/11/12 | -0.88 | 11/30/12 |
| Greenville, MS | 48 | 15.98 | 11/12/12 | 8.86 | 11/30/12 |
| Vicksburg, MS | 43 | 9.42 | 11/13/12 | 2.02 | 11/01/12 |
| Natchez, MS | 48 | 16.82 | 11/13/12 | 9.69 | 11/01/12 |

Total Flood Warning products issued: 0

Total Flood Statement products issued: 0

Total Flood Advisories MS River : 0

Daily Climate and Ag WX Products (AGO'S) issued: 30

Daily CoCoRaHS Rainfall Products (LCO'S) issued: 30

Daily River and Lake Summary Products (RVD'S) issued: 30

Marty V. Pope
Service Hydrologist &
Latrice Maxie
Assistant Hydrologist/Observing Program Leader (OPL)

Note: Provisional stage and precipitation data were furnished with the cooperation of the Mississippi, Louisiana, and Arkansas National Weather Service Cooperative Observer Programs, United States Geological Survey (USGS), United States Army Corps of Engineers (USACE), Pearl River Valley Water Supply District (PRVWSD), Pat Harrison Waterway District, Pearl River Basin Development District, and the Mississippi Department of Environmental Quality.

cc: USGS Little Rock District
USGS Ruston District
USACE Mobile District
USACE Vicksburg District
USACE Mississippi Valley Division
USGS Mississippi District
SRH Climate, Weather and Water Division
Lower Mississippi River Forecast Center
Pearl River Valley Water Supply District
Hydrologic Information Center
Southern Region Climate Center
Pat Harrison Waterway District
Pearl River Basin Development District